

Reflection on the Age of the Universe

The Torah tells us God created the world in 7 days, and there has been 5776 years since the creation of the first man. Science tells us the world is 13.7 billion years old, and the oldest fossils in the human ancestral line is 2.8 million years old. In Unit 2 of our Chumash class, we addressed the following question: how are we to reconcile the Torah's view of creation and the age of the universe with those of science? Can we? Must we? According to the Rambam, we are obligated to seek reconciliation with Torah and science because we "must clarify the words of Torah." We read essays from the Lubavitcher Rebbe, Sanford Aranoff, and Rabbi Schwab; each has their own method of reconciling Torah and science (if they indeed deem science worthy of the effort).

The Lubavitcher Rebbe dismisses science's theory of the creation of the universe. He seems to think accepting Torah blindly constitutes knowledge, and only an uncritical mind would do the same for science. He also reminds the reader that a Jew is obligated to follow the Torah even if he has doubts. His argument hinges on the fact that the Creation is a non-observable and non-duplicable event. The Rebbe says we can't extrapolate that the conditions of the world are the same as they were when the universe was created. So the passage of time may have been different at the beginning of the universe.

Sanford Aranoff suggests that there are three different approaches to closing the gap between science and Torah. His first approach is to reinterpret rabbinic thought and literature. For example, it could be 5776 years from the first Shabbat, but eons may have passed during creation. The days of creation, in this case, would not be interpreted literally. His second approach is the science is incorrect and will be proven wrong at a later date. The problem he finds with this answer is science is constantly improving and refuting it will become harder as it grows stronger. His last approach says both Torah and science is correct, if one studies the difference between a scientific and Torah truth.

He distinguishes the difference as follows: science is built on things that can be tested. The Torah is built on that which cannot. One example would be revelation, which can not be

observed or verified. The revelation at Sinai is meaningless to science. During the 6 days of creation, God violate the scientific laws. Words such as “truth” only have meaning within a framework. For example, beauty is only meaningful when examined for its aesthetic value and cannot be quantified as in science. Aranoff resolves that the Torah and science approach truth differently, and neither can refute the other. Therefore the Creation story is scientifically meaningless and can be taken completely allegorically from a religious viewpoint. (After all, the sages say it is included in the Torah to reach us morals.)

To R’ Schwab, it seems self-evident that the 6 days of Bereishit were 24 hour periods, because the observance of Shabbat, a 24 hour day, commemorates the creation of the world. The question would thus be, how were there 24 hour days before the creation of the sun? An answer is found in Bereishit Rabba. It says that God created the form of the entire universe at once but did not make the luminaries visible from Earth until the 4th day. The Torah defines the first creation day as the time when creation-Light shines fully, then night is when it is intermingled with darkness. The universe is 5776 years old + 6 creation days. These creation days began to correspond with the Earth’s rotation on the first Shabbat. Before this, the Earth’s rotation may have been much faster. Therefore, billions of years during the era of creation are equal to 6 regular days today. When God rested on the 7th, all motion in the universe slowed down, so that one Earth rotation corresponded to a creation-Light day.

R’ Schwab continues by asking why did God create an aged universe, and why did He not create the world all at once? He believes if everything the universe was created in an instant, our awareness of God would be so strong it would remove all free will. The creation from nothing to chaos to order “hides” God from us. So it takes emunah to develop an awareness of God’s existence.

Of the three sources we considered trying to answer how to reconcile the Torah’s account of creation and the age of the universe with that of science, I preferred R’ Schwab. This article appealed to me more than the other two because he does his best to incorporate both the Jewish and scientific perspectives. While I find his reasoning weak--God’s trying to trick us? To test the truly faithful?-- I appreciated his definition of a creation-day vs. an Earth day. I did not agree with Aranoff that science and Torah are mutually exclusive, and thus cannot contradict each

other, and I did not agree with the Lubavitcher Rebbe, because I do not support blind faith in anything, religion and science included.